

REMARKS/ARGUMENTS

Claims 16-23 are pending in the Application, with claims 1-15 and 24-32 having been withdrawn. By this Amendment, claims 16-23 are being amended in response to the various rejections thereof on formal grounds and to otherwise improve their form. No new matter is involved.

On pages 2-4 of the Office Action, claims 16, 18, 19 and 21 are objected to because of informalities which are described. On pages 4-6 of the Office Action, claims 17-19 and 21-23 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite because of various informalities which are described. In response, Applicants are extensively amending claims 16-19 and 21-23 so as to correct the various informalities noted.

Addressing specific informalities which are said to exist in particular claims, and beginning with claim 16, the step of disposing a thermosetting seal material in an outer peripheral region of a display area between a pair of substrates is said to be misleading and to not delineate a display panel body. In response, Applicants are amending claim 16 by deleting "an outer" in the recitation of "a peripheral region of a display area". The step of disposing a thermosetting seal material is amended to now recite "said thermosetting seal material and said pair of substrates forming a display panel body". With regard to the recitation of a buffer plate, Applicants wish to clarify that the buffer plate has a layered structure with a rigid film between a pair of buffered layers. As amended, claim 16 defines the buffer plate as "being a layered structure which includes a rigid film having a high rigidity and buffer films provided to sandwich said rigid film therebetween and having a lower rigidity than the rigidity of said rigid film". As so amended, claim 16 is now submitted to be clear and definite. Regarding claims 18 and 19, the reference to "buffer film" rather than to "buffer films" has been corrected by the substantial

amendments to such claims. Similarly, the objection to claims 17-19 as reciting particular structure which does not affect the method in a manipulative sense has been corrected. In the case of each of these claims, the claim is being amended to define steps which incorporate a material such as metal and polytetrafluoroethylene rather than simply reciting such materials.

Regarding claim 21, such claim as amended recites "a pair of heating plates" in the first introduction thereof. Also, claims 21-23 have been amended to incorporate the materials recited therein into the various method steps. As so amended, the materials recited therein affect the methods recited thereby in a manipulative sense, so as to set forth proper method claims.

As so amended, claims 16-19 and 21-23 are now submitted to be clear and definite. Claim 20 was not rejected on formal grounds and is therefore assumed to be clear and definite in its present form.

On page 7 of the Office Action, claims 16 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,677,749 of Tsubota et al. in view of U.S. Patent 6,222,603 of Sakai et al. This rejection is respectfully traversed.

As defined in claim 16, for example, the present invention utilizes a buffer plate having a layered structure of a rigid film and buffer films which sandwich the rigid film. In contrast, Tsubota discloses a buffer plate structure in which a part of an elastic sheet 33 is opened. However, such reference does not disclose or suggest that the buffer plate has a three-layered structure or even a layered structure.

In accordance with the present invention, the buffer plate has high rigidity, a high thermal conductivity, and performs a buffering function. Because of all of these characteristics, during the manufacturing process of a liquid crystal display type panel, the buffer plate having an opening can be placed in a peripheral region of a display region with a high precision. At the same time, heat can be effectively

conducted to the thermosetting resin and the thermosetting field material placed between the substrates can be reliably thermally cured without damaging the substrates because of the buffering function. Tsubota only discloses a buffer plate with an elastic function and has no description or suggestion of even the necessity for having other functions in the manner of the present invention. Such reference neither discloses nor would it suggest to one skilled in the art that the buffer plate be formed in a layered fashion in the manner of the present invention.

Sakai discloses a buffer plate 12. However, the plate 12 has no opening in a portion corresponding to the display region, and in this respect is unlike the present invention. Additionally, although the buffer plate 12 has a two-layered structure rather than a single layer structure, there is no description or suggestion of having a three-layered structure with a pair of buffer films sandwiching a rigid film therebetween, as in the case of the present invention. Moreover, Sakai fails to disclose the necessity for having such a structure.

In addition, and as is clear from Fig. 7 and the corresponding description thereof in Sakai, the two-layered buffer plate 12 has a layered structure of an elastic layer 100 and a hard layer 200, with the hard layer 200 provided near the substrate 2b to be adhered. It is common knowledge in the art that, in a two-layered buffer plate having different materials, curling occurs in the buffer plate when the buffer plate is heated, due to differences in thermal expansion coefficients of the different materials. Such curling causes serious problems in the precision affixation of substrates. Sakai does not even recognize such problems. Consequently, Sakai would not suggest to one skilled in the art the method in accordance with the present invention in which a thermal curing process is applied using a buffer plate having a symmetric structure in which a buffer film sandwiches a rigid film. In addition, when a hard layer 200 is provided on a side near the

Appl. No. 09/917,099
Amdt. Dated October 27, 2004
Reply to Office Action of May 28, 2004

Attorney Docket No. 81784.0240
Customer No.: 26021

substrate, as described in Sakai, the substrate is likely to be damaged. Moreover, and as described above, because Sakai does not recognize provision of an opening in the buffer plate, if the buffer plate of Sakai is to be employed, the entire substrate is heated during the thermal curing of the seal material, which likely would cause generation of curling in the case of the substrate. However, Sakai only recognizes that satisfactory characteristics can be obtained with a buffer plate 12 having such a structure, and goes no further.

Therefore, claims 16 and 20 are submitted to clearly distinguish patentably over the attempted combination of references. Claims 17-19 and 21-23 depend from and contain all of the limitations of claim 16, so as to also distinguish patentably over the art.

In conclusion, claims 16-23 are submitted to clearly distinguish patentably over the art for the reasons discussed above, in addition to being clear and definite and without informalities, for the reasons discussed above. Therefore, reconsideration and allowance are respectfully requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (213) 337-6846 to discuss the steps necessary for placing the application in condition for allowance.

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Respectfully submitted,
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